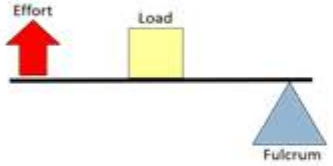
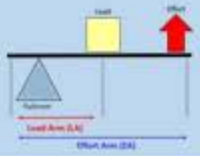
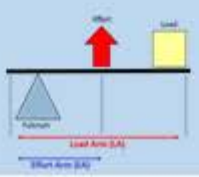
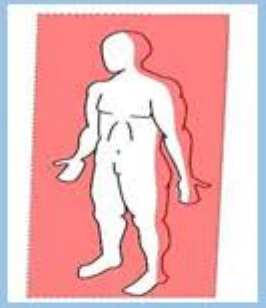
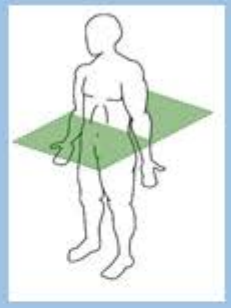
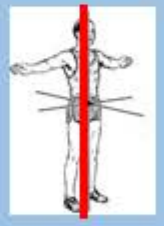
TURTON SCHOOL YEAR 10 PE KNOWLEDGE ORGANISER – TOPIC 2.1: MOVEMENT ANALYSIS

Fulcrum (F)	Load (L)	Effort (E)
A fixed pivot point	The weight/resistance to be moved	The source of energy that will be applied

Classes of lever	Drawing	Example		
First class lever:			F	1st
Second class lever:			L	2nd
Third class lever:			E	3rd

Mechanical Advantage	Mechanical Disadvantage
This is where a lever's **effort arm** is greater than its **load arm**. Large loads can be moved with limited effort.	This is were a lever's **load arm** is longer than its **effort arm**. Can only move light loads, but can be done at speed.
	

Frontal plane	Transverse plane	Sagittal plane
A vertical plane divides the body into **front** and **back.** 	A horizontal plane divides the body into **upper** and **lower** halves. 	A vertical plane divides the body into **right** and **left.**

Sagittal plane	Vertical plane	Frontal plane
Runs through the body horizontally from the **back** to **front.** Example: Cartwheel	Runs through the body vertically from the **top** to **bottom.**  Example: Full twist	Runs through the body horizontally from **left** to **right.** Example: Somersault